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28563 – RADIOINDUCED BREAST ANGIOSARCOMA: A CASE REPORT

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Introduction: Angiosarcomas are malignant tumors composed of neoplastic endothelial cells of blood or lymphatic vessels. They can develop in the skin, lungs, liver, or spleen, but 8% of these tumors occur in the breasts. They are classified into primary and secondary types. Primary angiosarcomas are rare tumors, with an incidence ranging from 0.04% to 0.05% of malignant breast tumors. Secondary angiosarcomas are associated with post-mastectomy lymphedema (Stewart-Treves syndrome) and those linked to post-surgical radiotherapy, whether after radical or conservative breast surgery, with an incidence ranging from 0.14% to 0.3% (radiation-induced tumors). **Methodology:** To write this case report, the authors conducted a literature review across the following databases: the United States National Library of Medicine (PubMed), Latin American and Caribbean Literature in Health Sciences (LILACS), Virtual Health Library (VHL), the National Institute for Health and Care Excellence (NICE), Cochrane Library, and Scientific Electronic Library Online (SciELO). A total of 45 publications related to the topic were identified, from which 12 articles were selected. Subsequently, all selected studies were read in full, applying eligibility criteria to determine inclusion or exclusion. Inclusion criteria: only original articles, clinical trials, and case reports written in the last five years in English, Spanish, and Portuguese that involve: (i) angiosarcoma of the breast as the disease, and (ii) radiation induction. Exclusion criteria: (i) editorials/expert opinions, (ii) letters/communications, and (iii) publications in languages other than those specified for the study. **Conclusion:** Following an incisional biopsy, the histopathological analysis revealed an atypical vascular lesion. Immunohistochemistry showed positivity for CD31 and CD34 antigens, absence of estrogen receptors, and amplification of the C-MYC oncogene confirmed the diagnosis of radiation-induced angiosarcoma, with a grade III anaplasia. Mammography demonstrated only skin thickening in the upper quadrants of the right breast (Breast Imaging Reporting and Data System — BI-RADS 2), while breast ultrasonography revealed well-defined subcutaneous nodular formations, parallel to the skin, with parietal calcifications suggestive of fat necrosis (BI-RADS 3). Subsequently, the patient underwent a modified radical mastectomy according to Madden's technique, along with evaluation of the lateral thoracic sentinel lymph node and the para sentinel lymph node, both of which were negative for malignancy. The patient showed an excellent postoperative course and, six months later, remains in good health, asymptomatic, with no evidence of active disease.